

I claim:

1. A method for diagnosing an immunologic food sensitivity comprising the steps of:

5 collecting a fecal sample;
 screening the fecal sample to detect the presence of an antibody to a particular food substance; and
 diagnosing an immunologic food sensitivity based on the presence of the antibody.

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2. The method of claim 1 further comprising the step of concentrating the fecal sample to obtain a testing portion after said collecting step and wherein said testing portion is the sample in said screening step.

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3. The method of claim 2 wherein the testing portion is undiluted.

4. The method of claim 2 further comprising the step of homogenizing the fecal sample prior to said concentrating step.

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5. The method of claim 2 wherein the testing portion is about 20 grams.

6. The method of claim 1 wherein said screening step utilizes an enzyme-linked immunosorbant assay (ELISA) testing kit to detect the presence of an antibody to a particular food substance.

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7. The method of claim 2 wherein said screening step utilizes an enzyme-linked immunosorbant assay (ELISA) testing kit to detect the presence of an antibody to a particular food substance.

8. The method of claim 2 wherein said concentrating step comprises the steps of:
centrifuging the fecal sample;
removing a supernatant portion from the centrifuged fecal sample; and
using the supernatant portion as the testing portion.

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9. The method of claim 8 wherein the centrifuging step is performed at a rotation speed dependant upon the viscosity of the sample.

10. The method of claim 8 wherein the rotation speed is between about 13,500 and
10 20,000 rpm.

11. The method of claim 8 wherein the testing portion is screened undiluted and is about equal to an amount of diluted serum required by standard use of an ELISA kit.

- 15 12. The method of claim 2 wherein said concentrating step comprises the steps of :
freeze-drying the fecal sample to a solid material; and
reconstituting the solid material with water to form a reconstituted testing portion.

13. The method of claim 12 wherein said reconstituted testing portion is about 25%
20 solid material and about 75% water.

14. The method of claim 2 wherein said fecal sample contains more than about 90%
water in its excreted state and wherein said concentrating step comprises the steps of:
freeze-drying the fecal sample to a solid material; and
25 reconstituting the solid material with water to form a reconstituted testing portion.

15. The method of claim 1 wherein the immunologic food sensitivity is gluten sensitivity or celiac sprue.

16. The method of claim 15 wherein the antibody is antigliadin IgA or antitissue transglutaminase IgA.

17. The method of claim 2 wherein the immunologic food sensitivity is gluten
5 sensitivity or celiac sprue.

18. The method of claim 17 wherein the antibody is antigliadin IgA or antitissue transglutaminase IgA

10 19. The method of claim 1 wherein the immunologic food sensitivity is yeast sensitivity.

20. The method of claim 2 wherein the immunologic food sensitivity is yeast
15 sensitivity.

21. The method of claim 19 wherein said yeast is *Saccharomyces cerevisiae*.

22. The method of claim 1 wherein the immunologic food sensitivity is milk
20 sensitivity.

23. The method of claim 22 wherein the milk sensitivity is lactalbumin, casein, or bovine serum albumin sensitivity.

24. The method of claim 1 wherein immunologic food sensitivity is egg sensitivity.

25. The method of claim 24 wherein the egg sensitivity ovalbumin sensitivity.
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26. A method of diagnosing an immunologic food sensitivity comprising the step of detecting the presence of an HLA-DQ1,3 allele, a subtype of an HLA-DQ1,3 allele, an HLA-DQ1,1 allele, or a subtype of an HLA-DQ1 allele in a patient under diagnosis.

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27. The method of claim 26 wherein the food sensitivity is gluten sensitivity or celiac sprue.

28. The method of claim 26 wherein said subtype of HLA-DQ1,3 is HLA-DQ1,7;
10 HLA-DQ1,8; or HLA-DQ1,9.

29. The method of claim 26 wherein said subtype of HLA-DQ1 is HLA-DQB1*0501 or HLA-DQB1*0602.

30. A method of diagnosing microscopic colitis comprising the step of detecting the presence of an HLA-DQ2 allele, an HLA-DQ8 allele, an HLA-DQ1,3 allele, a subtype of an HLA-DQ1,3 allele, an HLA-DQ1,1 allele, or a subtype of an HLA-DQ1 allele in a patient under
5 diagnosis.

31. The method of claim 30 wherein said subtype of HLA-DQ 1,3 is HLA-DQ1,7; HLA-DQ1,8; or HLA-DQ1,9.

10 32. The method of claim 30 wherein said subtype of HLA-DQ1 is HLA-DQB1*0501 or HLA-DQB1*0602.

33. A method of diagnosing an immunologic food sensitivity comprising the steps of:
identifying a patient at risk for immunologic food sensitivity;
collecting a bodily fluid sample or tissue sample;
5 screening the sample to detect the presence of an antibody to a particular food
substance; and
diagnosing an immunologic food sensitivity based on the presence of the
antibody.

10 34. The method of claim 33 wherein said identifying step comprises the step of
diagnosing the patient with a disease or disorder related to an immunologic food sensitivity.

35. The method of claim 34 wherein said related disease or disorder presents similar
symptoms as said immunologic food sensitivity.

15 36. The method of claim 35 wherein said symptoms are malabsorption of fluids,
malabsorption of dietary nutrients, vitamin deficiency, osteoporosis, fatigue, anemia, diarrhea,
weight loss, bloating, flatulence, abdominal pain, constipation, nausea, growth retardation in
children, seizures, and other unexplained neurologic symptoms.

20 37. The method of claim 34 wherein said related disease or disorder is irritable bowel
syndrome, microscopic colitis, chronic diarrhea, chronic liver disease, gastroesophageal reflux,
hepatitis C, hepatic disease, Crohn's disease, an autoimmune disease, autism, alcoholism,
idiopathic neurologic syndromes, or neuropsychiatric syndromes.

25 38. The method of claim 34 wherein said related disease or disorder has a genetic
association with an HLA-DQ2; HLA-DQ8; HLA-DQ1,3; HLA-DQ1,7; HLA-DQ1,8; HLA-
DQ1,9, HLA-DQ1,1, HLA-DQB1*0501 or HLA-DQB1*0602 allele.

39. The method of claim 33 wherein said identifying step comprises detecting the presence of an HLA-DQ1,3 or a subtype of an HLA-DQ1,3 allele in the patient.

40. The method of claim 39 wherein said subtype is HLA-DQ1,7; HLA-DQ1,8; or
5 HLA-DQ1,9.

41. The method of claim 33 wherein said screening step utilizes an enzyme-linked immunosorbant assay (ELISA) testing kit to detect the presence of an antibody to a particular food substance.
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42. The method of claim 34 wherein said screening step utilizes an enzyme-linked immunosorbant assay (ELISA) testing kit to detect the presence of an antibody to a particular food substance

15 43. The method of claim 33 wherein said sample is a fecal sample.

44. The method of claim 43 further comprising the step of concentrating said fecal sample to obtain a testing portion prior to said screening step and wherein said testing portion is the sample in said screening step.
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45. The method of claim 44 further comprising the step of homogenizing the fecal sample prior to concentrating said sample.

46. The method of claim 44 wherein the testing portion is screened undiluted and is
25 about equal to an amount of diluted serum required by standard use of an ELISA kit.

47. The method of claim 33 wherein the immunologic food sensitivity is gluten or celiac sprue.

48. The method of claim 47 wherein the antibody is antigliadin IgA or antitissue transglutaminase IgA.

49. A method for diagnosing an immunologic drug sensitivity comprising the steps of:

collecting a fecal sample;
5 screening the fecal sample to detect the presence of an antibody to a particular drug substance; and
diagnosing an immunologic drug sensitivity based on the presence of the antibody.

10 50. The method of claim 49 further comprising the step of concentrating the fecal sample to obtain a testing portion prior to said screening step and wherein said testing portion is the sample in said screening step.

15 51. The method of claim 50 wherein said screening step utilizes an enzyme-linked immunosorbant assay (ELISA) testing kit to detect the presence of an antibody to a particular drug substance.

20 52. The method of claim 50 wherein said concentrating step comprises the steps of:
centrifuging the fecal sample;
removing a supernatant portion from the centrifuged fecal sample; and
using the supernatant portion as the testing portion.

25 53. The method of claim 50 wherein the testing portion is screened undiluted and is about equal to an amount of diluted serum required by standard use of an ELISA kit.

30 54. The method of claim 50 wherein said concentrating step comprises the steps of:
freeze-drying the fecal sample to a solid material; and
reconstituting the solid material with water to form a reconstituted testing portion.

55. A method of diagnosing an immunologic food sensitivity comprising the steps of:
diagnosing a patient with microscopic colitis;
treating the patient's microscopic colitis with bismuth subsalicylate;
diagnosing an immunologic food sensitivity if the patient's microscopic colitis
5 does not respond to the bismuth subsalicylate treatment or if the patient's microscopic colitis
relapses after treatment.

56. The method of claim 55 further comprising the following steps:
collecting a fecal sample;
10 screening the fecal sample to detect the presence of an antibody to a particular
food substance; and
confirming diagnosis of an immunologic food sensitivity based on the presence of
the antibody.

57. The method of claim 56 further comprising the step of concentrating the fecal
15 sample to obtain a testing portion and wherein said testing portion is the sample in said screening
step.

58. The method of claim 57 further comprising the step of homogenizing the
20 fecal sample prior to concentrating said sample.

59. The method of claim 56 wherein said screening step utilizes an enzyme-linked
immunosorbant assay (ELISA) testing kit to detect the presence of an antibody to a particular
food substance.

60. The method of claim 57 wherein said concentrating step comprises the steps of:
centrifuging the fecal sample;
removing a supernatant portion from the centrifuged fecal sample; and
25 using the supernatant portion as the testing portion.

61. The method of claim 57 wherein the testing portion is screened undiluted and is about equal to an amount of diluted serum required by standard use of an ELISA kit.

5 62. The method of claim 57 wherein said concentrating step comprises the steps of :
freeze-drying the fecal sample to a solid material; and
reconstituting the solid material with water to form a reconstituted testing portion.

10 63. The method of claim 55 wherein the immunologic food sensitivity is gluten
sensitivity or celiac sprue.

64. The method of claim 63 wherein the antibody is antigliadin IgA or antitissue
transglutaminase IgA.